

**THE TRANSPORTATION-LAND USE CONNECTION
TTP 289A-005; CRN: 80324**

SYLLABUS

Winter Quarter 2003

Instructor: Susan Handy

Meeting Time: Tuesdays and Thursdays, 10:30 a.m. – Noon

Meeting Dates: January 7 thru March 13, 2003

Location: 2120J Wickson

Credit: 3 units, letter grade

INTRODUCTION

Transportation and land use – or patterns of land development – are inextricably linked in numerous interesting and important ways. The construction of a new transportation facility, such as a freeway or a light rail line, will influence the nature and location of new development in the corridor. The nature and location of new development will influence patterns of travel for residents of the area. Transportation facilities themselves are a significant element of the built environment, creating connections but also barriers. An understanding of these relationships is critical to the solution of our transportation and transportation-related problems, including congestion, fuel consumption, air quality degradation, land consumption, social inequities, and public health.

This seminar will focus on the interrelated questions of how transportation investments and policies shape land use patterns, how land use patterns in turn shape travel behavior, and how transportation itself functions as an element of the built environment in metropolitan areas. For each of these questions, we will explore key theories and concepts, research methodologies and findings, traditional and emerging policy approaches, and techniques for forecasting policy impacts. My goal for the course is to introduce students to the essential concepts, influential thinkers, and important debates associated with the transportation – land use connection as a foundation for both academic and professional work in the transportation field.

Designing this course was a challenge. This topic is much too big to cover thoroughly in a 10-week quarter, so I have chosen to provide a balance between breadth, through class time, and depth, through assignments. Although time is linear, the topics covered are not, and so discussions may sometimes jump ahead or jump back or otherwise run in circles. For reach of the topics covered, I could have put together 10-weeks of reading, and I have done my best to keep the reading assignments to an acceptable level; as we go, I will provide guidance as to which parts to read in depth and which to skim or save for future reference. With a mix of masters and PhD students, I have chosen to provide a balance between the more academic concerns of theory and research and the more practical concerns of policies and tools; all students will benefit from exposure to all of these

topics. Naturally, some students will find some topics of more interest than others, and the assignments are designed to allow students to explore in more depth than is possible in class a topic of their own choosing.

ORGANIZATION

The course will be organized as follows:

Introduction (1 class)
Impact of transportation on land use – theory (3 classes)
Impact of transportation on land use – research (3 classes)
Impact of land use on travel behavior – theory (1 class)
Impact of land use on travel behavior – research (2 classes)
Land use – transportation policy (4 classes)
Land use – transportation tools (2 classes)
Transportation as land use – theory (1 class)
Transportation as land use – policy (1 class)
Wrap-up (1 class)

Because of the Transportation Research Board conference, which takes place during the second week of classes in Washington, DC, the January 14th and January 16th classes will be rescheduled to a date to be determined. A detailed schedule of class topics and assigned readings is attached.

REQUIREMENTS

Students will complete two written assignments and a term paper on a topic of their choosing. The term paper (of at least 12 but no more than 18 double-spaced pages) will be due at the end of the quarter but students will be required to meet with me to discuss possible topics within the first three weeks of the quarter and must submit a one-page written description of their topics in the fourth week of the quarter. The first written assignment will be a 3 to 4 page critique of a peer-reviewed research article (or set of articles). Students should choose an article that relates to their term paper topic. The second written assignment will be a 3 to 4 page report on the use of a selected transportation or land use policy by communities across the U.S. Students may want to select a policy that relates to their term paper topic. Detailed descriptions of these assignments will be handed out during the quarter, and students will have two weeks to complete the assignments.

In addition to the term paper and the two written assignments, students are expected to complete assigned readings (as outlined in the attached schedule) and participate in class discussions and exercises. The term paper will account for 50%, the two written assignments for 20% each, and class participation for 10% of the final grade. The term paper and written assignments will be graded based on the quality of the research, the

merit of the argument, and the clarity of the writing. There will be no exams in this course.

I expect students to include appropriate citations in their term papers and written assignments, following one of the standard citation formats. Lots of useful websites are available to help students determine when citations are appropriate and to avoid the accidental plagiarism (for example, this site at UCD: <http://sja.ucdavis.edu/avoid.htm>). My rule of thumb is that citations should be provided in two kinds of cases: 1. for the original sources of information that the reader might want to check or confirm herself (e.g. data, key facts, laws or policies, etc.), and 2. for the original sources of ideas that are not the author's own. These rules are intended to protect the author from plagiarism and falsification charges but also to ensure that the author's own ideas are clearly distinguished so that the author receives proper credit and recognition. *The importance of following these rules cannot be overstated! I will not tolerate plagiarism or falsification*

Citation format is also critical and is getting more complicated as more materials become available on-line. The author-date format is used most widely in transportation journals (i.e. (author year) in the text, with a list of references at the end of the paper) but other formats are acceptable if used correctly and consistently. My general rule of thumb is that you need to provide enough information that the reader could find the item herself. For things like government reports, this includes the agency, the report number, the date, and, if possible, a phone number or email address for the agency. I suggest using the Chicago, APA, or MLA manuals of style, available through the library (<http://www.lib.ucdavis.edu/instruc/citing/>).

Students who require special accommodations because of disabilities should visit the Disability Resource Center (<http://drc.ucdavis.edu/>) at the beginning of the quarter. I will not be able to provide for special accommodation unless the student has first gone through the process required by the DRC. Students who will be missing class or cannot meet assignment deadlines for religious reasons should let me know as far ahead as possible.

OFFICE HOURS

My office hours will be Tuesdays and Thursdays from 4 to 5pm in 2142 Wickson. I expect every student to come by early in the semester to discuss paper topics, but students may also stop by to talk about the class or other items. Students who can't make my office hours can schedule a meeting with me by email request (slhandy@ucdavis.edu). In general, email is the best way to reach me for quick questions about readings, assignments, office hours, etc.